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SPECIAL AIRWORTHINESS INFORMATION BULLETIN

Aircraft Certification Service
Washington, DC

<http://www.faa.gov/aircraft/safety/alerts/SAIB>

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin alerts you, owners and operators of **deHavilland Inc. DHC-2 Mk. I, II, and III model airplanes**, of a potential safety issue. The selector valve within the fuel system of this type aircraft is the leading cause of an un-commanded engine shutdown.

Background

An accident investigation that involved the forced landing of a DHC-2 airplane revealed that the fuel selector valve caused fuel starvation. The valve demonstrated a loss of seal, which could allow air into the system. This faulty condition could allow for un-commanded cross feeding between fuel tanks.

This selector valve is a swing type one-way check valve. There are two identical check valves in the system. The first is located downstream of the fuel strainer. The second is located in the fuel delivery line between the inlet and outlet of the fuel wobble pump.

If someone operates the valve dry, the internal seal arrangement will become damaged due to the lack of a lubricating effect of the fuel. The failure of the selector valve can lead to the migration of fuel from wing tip tanks to the front belly fuel tank and eventually to the center and rear tanks through the vent piping.

Recommendations

We recommend:

- A one-time inspection of the fuel system with a recurring follow-up every 5 years.
- If you find any anomalies, you should acquire and replace the appropriate parts (such as check valves) through the Bombardier Customer Service Center Montreal or replace their fuel management system with a certified system.
- We also recommend that you notify Transport Canada and us if you have any difficulties.

For Further Information Contact

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